PART V

CROPS

Major Crops

Kittitas County cropland is devoted mainly to the raising of feed crops as part of its specialization in livestock farming. In the 1954 Census, the most important crops listed in order of acreage were: alfalfa (32,400 acres), wheat (10,720), clover and timothy hay (10,700), oats (10,200), barley (3,400), potatoes, (2,400) and sweet corn (1,500).

Cor Trends

The crop history of any farming region reflects economic changes to a large degree. A number of changes are apparent in the emphasis and acreage Kittitas County farmers have given to leading crops and some minor crop specialties. These changes are part of an increasing dependence upon livestock farming, and expansion in both dairying and beef production. The trend also shows the influence of mechanization of agriculture with its decrease in horses.

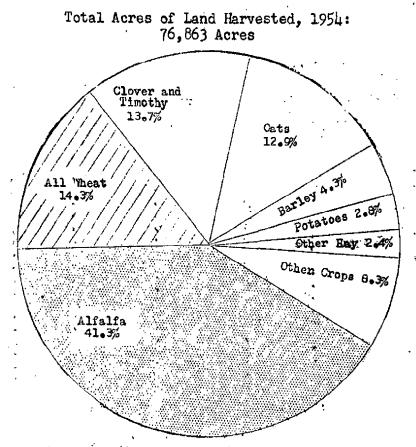


Figure 10:- Percent of Total Cropland in Leading Crops
Kittitas County, 1954.

(Based on U.S. Census of Agriculture, 1954)

Since 1939 there have been several noticeable trends in the crop programs of Kittitas farmers. Total cropland harvested has generally been decreased and pasture land has been increased. Forage crops have been increased to feed an expanded population of beef cattle and to fulfill commercial hay market demands. Greatest expansion has been in alfalfa hay which. went from 11,500 acres in 19hh to 33,000 in 1955. As alfalfa was increased, plantings of clover, timothy and other hays were decreased by about 14,000 acres. Commercial vegetable crops for the Puget Sound fresh market and for freezing and canning plants within and adjacent to Kittitas County have been increased. Sweet corn and green peas are crops which are more important than in the 1930's. Sweet corn has ranged between 1,100 and 3,800 acres in recent years compared with only about 600 acres in 1939.

Most of the other dryland and irrigated crops have been decreased in the last 15 years. Wheat, barley, cats, field corn, clover hay, clover and alfalfa seed have been on a downward trend. Potatoes are down by nearly 5,000 acres since the early 1940's. Some of these crops have been reduced to provide permanent pasture land for livestock.

Hay and Silage Crops

For many years hay and silage have been the most important crops grown from an acreage standpoint. Alfalfa covers the largest acreage and on the average takes up nearly half of the entire harvested cropland. Clover and timothy, other tame hays and wild hays are minor in comparison with alfalfa. All hay including silage normally covers about 48,000 acres, or 55 percent of the harvested cropland.

Acreage, Yield and Production,	y Hay and Kittitas	Alfalfa County,	Hay 1939-1955
Clover and Minothy Vers			

	Clover and Timothy Hay		Alfalfa Hay		
Acres (sores)	Yield (tons)	Production (tons)	Acreage (acres)	Yield (tons)	Production (tons)
939 20,800 940 17,200 941 21,000 942 20,100 943 22,700 944 22,100 945 24,500 946 22,200 947 21,700 948 22,200 949 25,000 950 24,500 951 20,700 952 15,800 953 12,600	2.0 1.6 2.1 2.1 2.5 1.8 2.4 2.5 2.6 2.0 2.0 2.2 2.0	41,600 28,100 44,500 41,400 55,900 38,900 59,400 56,500 56,500 57,000 49,000 49,000 45,000 31,600 27,700	20,200 21,200 21,600 16,100 13,800 11,500 11,500 11,500 11,600 12,600 20,000 20,100 22,500 27,900	2.4 5.6 6.6 2.5 2.8 2.7 2.7 2.7 2.7 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	48,500 53,600 56,200 41,900 41,400 28,800 31,500 31,500 31,500 48,800 60,000 70,500 70,500 93,100

Sources: U.S. Census, Agriculture, 1939-1954.

U.S. Dept. of Agric., AMS, Estimates Division, State of Washington, 1940-1955. Increasing specialization in hay and silage is directly connected with the increasing livestock population. A large supply of hay is needed locally to support 71,000 cattle, 21,000 sheep and 2,080 horses. More than enough hay is produced for local needs and some is shipped to dairies and feed lots in the Puget Sound area. Recent commercial surpluses of all types of hay have been over 52,000 tons per crop year.

Kittitas county ranks fifth among Washington counties as a producer of alfalfa. In the recent peak harvest (1955) the area produced an estimated 115,500 tons from 33,000 acres, a yield of three tons per acre. Alfalfa was grown on 681 farms in 1954, over half of all the farms in the county. Most dairy and beef farms grow their own alfalfa and few produce it for the commercial market. Baled alfalfa is perhaps the important commercial crop locally exchanged between farms and sold to outside markets. About 40,210 tons of alfalfa worth \$1,206,300 were sold off 324 farms in 1954. In some years it is even more valuable but the price does fluctuate.

Kittitas County is noted as a commercial producer of baled timothy hay marketed to race horse stables on the Pacific Coast. Timothy in mixture with alfalfa, clover and in bales of pure timothy is produced on about 200 farms. About 100 farms sell it on the market. Over 11,000 tons of timothy and clover worth about \$220,000, have been sold annually in recent crop years.

Other types of hay and silage support the livestock industry of the Kittitas Valley. Hays made from cats, vetch and wild grasses for local on-farm use are grown on 4,000 to 6,000 acres per year. Silage cutting and storage of alfalfa, grasses, green grain and sweet corn fodder is a more recent practice. Storage of silage in upright and pit silos has increased in recent years. In 1954 2,880 tons of silage were put up compared with only 695 tons in 1949. The acreage cut for silage went from 180 to 410 acres as 16 additional farms adopted this practice during the period 1949-1954.

Wheat

Kittitas County ranks seventeenth among Washington counties in wheat production. In 1954 about 14 percent of the harvested cropland grew wheat. In general practice about 5 percent of the crop is winter wheat and 95 percent is sown in the spring. Production since 1939 has varied from a low of 161,600 bushels from 3,400 acres in 1955 to a peak of 538,000 bushels from 11,000 acres in 1947. Because of year-to-year changes in weather conditions and soil moisture, the average yield has varied from 31 to nearly 49 bushels per acre. Yields are higher on the irrigated soils of Kittitas County than on the dryland soils in central and eastern Washington counties.

Wheat growers have experimented with numerous varieties. In 1955 they favored the common-white wheat (spring) varieties which made up about 95 percent of the crop. Federation led in 1955, making up about 67 percent of the wheat.

Wheat is grown on about 400 farms, or by two-fifths of Kittitas County farmers. The number of farms growing wheat has remained about the same since 1950. The main producing region is the valley area surrounding Ellensburg. In 1954 the Kittitas Valley contained about 420 farms which produced a combined total of about 397,240 bushels of wheat from 11,720 acres.

Table 18:- Varieties of Wheat Grown in Kittitas County, 1955

Classes and Varieties of Wheat	Production (bushels)	Percent of Total Crop
White Club Wheat (Winter)	16,300	4.9
Hard Red Spring		•••
Common-White Wheat (Spring) Marfed	90,110	27.2
Golden	950	
Orfed	1,800	.5
Federation	222,400 331,560	67.1

Source: U.S.D.A., AMS, Agricultural Estimates Division, State of Washington.

Oats

Oats grown for feed grain and for hay is the second most important small grain crop in Kittitas County. Producing over 730,000 bushels on about 10,000 acres in recent years, Kittitas ranks eighth among Washington counties in this cereal. Grown under irrigation, yields are generally heavy, ranging from 60 to 75 bushels per acre. The record production was the crop of 1948 when an estimated 908,800 bushels were harvested from 14,200 acres. Oat acreage has gone down in recent years but production has gained through higher yields. Most of the oats are threshed and combined and used locally for feed. Oats are produced on 430 general and grain farms. Over 500,000 bushels are sold commercially to local buyers and in the regional and national grain trade. The oat grain crop of 1954 had a sale value of over \$580,000.

Table 19:- Cats, Acreage, Yield and Production Kittitas County, 1939-1950

Year	Cats				
	Aoreage (aorea)	Yield (bushels per aore)	Production (bushels)		
1939 1940 1941 1943 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955	11,600 11,700- 9,100 11,800- 10,500- 10,500- 11,000- 11,100- 14,200- 12,100- 11,200- 9,400- 9,500- 10,200- 9,800-	63 59 74 71 74 67 72 67 68 64 59 64 59 64 72 72	730,800 690,300 673,400 837,800 740,000 763,500 763,200 804,000 754,800 906,800 713,900 755,200 620,400 586,800 684,000 734,400 735,000		

Source: U.S. Census, Agriculture, 1939-1954. U.S. Dept. of Agric., AMS, Agric. Estimates, State of Wash., 1940-55.

Table 20.- Wheat and Barley: Acreage, Yield and Production Kittitas County, 1939-1955

		All Whea	t	Barley		
Tear	Acreage	Yield	Production	Acreage	Yield	Production
. 1	(acres)	(bushels	(bushels)	(acres)	(bushels	(bushels)
		per acre)			per acre)	5 /
1939	8,900	36.3	323,100	3,500	49.0	171,500
1940	11,000	37.0	407,000	4,800	49.0	235,200
1941	8,300	32.0	265,600	5,100	55.0	280,500
1942	6,200	31.0	213,900	7,700	60.0	462,000
1943	7,200	45.8	330,000	5,100	59.0	300,900
1944	7,780	37.9	294,700	4,300	53.0	227,900
1945	12,700	36.7	466,500	1,880	55.0	103,400
1946	12,200	36.7	448,000	1,300	52.5=	68,200
1947	11,000	48.9	538,000	2,500	50.0	125,000
1948	13,300	35.3	469,000	3,500	56.0	196,100
1949	13,000	31.5	410,000	4,300	48.0	206,400
1950	900,11	41.0	487,600	7,000	51.0	357,000
1951	12,100	37.9	458,900	4,200	58.0	243,600
1952	10,900	34.7	378,500	1,700	56.0	95,200
1953	12,870	33.5	430,620	1,920	63.0	121,000
1954	10,720	34.5	369,960	3,400	49.0	166,700
1955	00يار 3	47.2	161,600	400 لو 3	47.5	161,600

Source: U.S.D.A., AMS, Agric. Estimates Division State of Washington

Table 21.- Spring Wheat and Winter Wheat Kittitas County, 1939-1956

		Spring Whe	at	Winter Wheat		
Year	Acreage (acres)	Yield (bushels per acre)	Production (bushels)	Acreage (acres)	Yield (bushels per acre)	Production (bushels)
1939 1940 1941 1942 1944 1944 1946 1947 1948 1949	8,100 10,000 8,100 5,900 6,000 6,300 8,200 8,900 10,600 13,000 12,000 9,000	37.9 37.5 32.2 32.1 51.0 39.5 37.0 49.3 35.5 32.0 40.0	307,100 375,000 260,800 189,400 306,000 248,850 303,400 329,300 523,000 462,000 384,000	800 1,000 200 1,000 1,200 680 1,100 600 1,000 2,900	20.0 32.0 21.0 21.5 20.0 20.5 35.0 33.5 37.5 23.3 26.0 14.0	16,000 32,000 4,800 24,500 24,500 21,000 13,940 38,500 20,100 15,000 7,000 26,000 127,600
1951 1952 1953 1954 1955 1956	11,200 9,900 12,000 11,000 9,100 7,380	38.0 35.0 34.0 35.0 33.5 47.5	425,600 346,500 408,000 385,000 304,850 350,550	900 1,000 870 720 970 220	37.0 32.0 26.0 17.0 29.0 25.0	33,300 32,000 22,620 12,240 28,130 5,500

Source: U.S.D.A., AMS, Agric. Estimates Division State of Washington

Barley

Barley is the third most important crop in Kittitas County. This grain grown for feed and some for commercial shipment has trended downward since peak crops in 1942 and 1950. Grain farmers have varied their plantings from a low of 1,300 acres in 1946 to as much as 7,700 in 1942. Under irrigation the yields are 45 bushels per acre and higher. A minority of farms (less than 175) generally raise it. Most of the production is sold to the local and regional feed trade. Over 100,000 bushels are marketed per year.

Com

Field corn grown under irrigation for feed grain and silage is a minor crop on general and livestock farms. Since reaching a peak of about 200 acres yielding 10,000 bushels in 1949, the crop has dropped off to about 30 acres in recent years. Half of the crop is generally harvested for grain but recently there has been more cut for silage. In earlier years much of the corn was left in fields to be grazed by cattle and hogs.

Rye

Rye is a minor forage and cash grain crop grown on fewer than a dozen farms. Rye acreage and production has varied from as little as 20 acres yielding 160 bushels in 1946 to as high as 160 acres yielding 2,720 bushels in 1950.

Table 22:- Field Corn and Rye, Acreage, Yield and Production, Kittitas County, 1939-1955

Year	Field Corn			Field Corn Rye		
	Acreage acres	Yield bushels	Production bushels	Acreage acres	Yield bushels per acre	Production bushels
1939 1910 1911 1912 1913 1914 1915 1916 1917 1950 1951 1953 1955 1955	30 30 10 30 10 30 60 80 70 200 150 150 110 60 140 30	31.0 50.0 65.0 37.0 49.0 51.0 51.0 50.0 47.5 49.1 43.3 40.8 51.7	1,240 1,500 1,950 370 1,470 3,060 4,080 3,650 10,000 13,500 7,600 5,400 2,600 1,630 1,550	50 50 50 70 40 20 20 40 90 90 90 90 90 90 90	15.2 12.0 16.0 12.0 9.5 8.0 16.7 17.0 14.0 17.0 13.8 5.8 10.6 16.0 13.0 23.0 16.3	760 600 800 840 380 160 500 340 560 2,720 1,240 460 740 800 390 1,380 1,140

Sources: U. S. Census, Agriculture, 1939-1954

U. S. Dept. of Agric., AMS, Agric. Estimates, State of Washington, 1940-1955

Vegetable Crops

With its large irrigated acreage and a good location for selling vegetable crops to fresh markets and processing plants in western and central Washington, Kittitas vegetable production has increased. With the exception of potatoes there has been an increased interest in these cash crops. Potatoes, sweet corn, green peas and dry field beans are the main vegetable crops.

Estatoes

The Lower Kittitas Valley is one of the major potato growing areas of the state. A local district, the Badger Pocket area, specializes in this crop. Acreage reached a peak of 8,000 acres yielding 67,000 tons during the strong wartime market year of 1943. Planting and production was decreased after the war, going down to 2,150 acres and 21,000 tons by 1956 as state potato production shifted to Grant, Adams, Benton and Yakima Counties. Heavy and competitive production in the newer irrigated areas caused many Kittitas growers to change to other crops. Kittitas County, however, is still an important producer. About 175 farms grew potatoes in 1954 and the county ranks fourth in acreage and production. Over 20,000 tons are harvested per year.

Table 23:- Potatoes and Sweet Corn, Acreage and Production Kittitas County, 1941-1956

-i-chana	Pota	toe s	Sweet (orn 1/
Year	Acres	Prod. tons	Acres	Prod. tons
1941	7,000	72,000		
1942	7,000	65,000		 =
1943	8,000	67,000		
1944	5,500	56,000		
1945	6,200	62,000		
1946	5,200	59,000	~~	
1947	4,300	52,000		
1948	5,200	65,000	3,300	14,500
1949	4,000	48,000	3,600	10,350
1950	3,500	000 و 42	3,000	15,000
1951	000ء3	38,000	2,500	11,000
1952	3,200	41,000	3,300	17,000
1953	3,000	34,500	3,800	20,000
1954	2,500	32,500	1,500	6,500
1955	2,450	28,500	1,100	4,400
1956	2,150	21,000	1,400	6,800
1/ Not	availa	ble pric	r to 701	R

1/ Not available prior to 1948.

Source: U.S. Dept. of Agric., AMS, Agric. Estimates, State of Wash.

Sweet Corn and Green Peas

In the late 1940's Kittitas farms began specializing in irrigaged sweet corn for the fresh market in Puget Sound cities and to supply two vegetable freezing and canning plants at Ellensburg. A record crop of 3,800 acres

yielding 20,000 tons was produced by about 100 growers in 1953. Production fell off as processor demands decreased. By 1956 there were less than 50 growers and their total harvest was 6,800 tons from 1,400 acres. Sweet corn acreage was third in the state in the 1954 Census.

Peas for processing at Ellensburg was an important cash crop in the 1930's. In 1936 there were about 8,000 acres grown on newly irrigated land. Pea weevil and other insects caused abandonment after peak crops in the 1930's. In 1949 the Census of Agriculture showed only 520 acres in Kittitas County and only 230 acres were recorded in 1954.

Sugar Bests

Sugar beets are a commercial specialty crop harvested for sale to the beet sugar mills at Toppenish and Moses Lake. Acreages have varied in accordance with yearly contracts between growers and processors and quotas allowed growers under the Federal Sugar Act of 1948. Recent crops harvested for sugar have been lower than in the late 1930's, but are trending upward since the small crops of the period between 1945 and 1949. The beets are all grown under irrigation and about 20 farms raise this cash crop in the Kittitas Division irrigation area.

Table 24:- Sugar Beets Harvested Kittitas County, 1938-1955

	A COLOR SERVICE		
Year	Acres Harvested	Year	Acres Harvested
1938 1939 1940 1941 1942 1943 1944 1945 1946 1948	2,055 608 548 379 591 484 299 233 171	1949 1950 1951 1952 1953 1954 1955	319 537 278 281 558 720 631

Source: Agricultural Stabilization Committee, Washington State,

Seed Crops

Seed crops of alfalfa and clover have been of declining importance in the irrigated agriculture of the Kittitas Valley since 1939. Production has varied from year to year and has trended downward sharply in recent seasons. In 1939 Kittitas County was the state's leading producer of clover seed with 425,000 pounds from 3,320 acres. By 1954, however, the county was only a minor producer. Alfalfa seed growing and harvesting has practically been abandoned since 1949. Commercial hay growers have tended to abandon seed harvesting in order to produce larger volumes and better quality of baled hay through two

cuttings per year and cutting hay before it reaches the over-ripe seed bearing stage. Newer irrigated areas in eastern Washington with better yields of seed also entered into compecition, making seed growing less profitable in Kittitas County.

Table 25 - Cliver and Alfalfa Seed Kittites County, 1939-1954

	Clove	z Seed	Alfalfa Seed	
Year	Acres	Pounds of Seed	Acres	Pounds of Seed
1939 1944 1949 1954	3,320 374 435 20	425,000 61,140 45,044 5,000	283 67 84 0	40,000 8,820 15,425 0

Source: U.S. Census of Agriculture

Tree Fruits and Berries

Interest in tree fruit farming is considerably lower at present than it was some years ago. Orchard growing was never developed on the scale in the Kittitas Valley as it was in neighboring Yakima and Wenatchee Valleys. A later start, cooler climatic conditions and marketing competition with areas in Yakima and Chelan Counties tended to discourage the development of commercial orchards in Kittitas County's irrigated lands. Orchards reached their peak acreage in the 1920-1930 cacade and since then many were abandoned or uprooted for forage and vegetable crops. At present there are only 36 farms with orchards of more than 20 trees and only 16 are specializing in fruit. Slightly over 200 acres are in commercial orchards. Fruit trees are led by apples and pears.

Table 26:- Bearing Fruit Trees in Kittitas County 1900-1954.

Year	Numbers of Bearing Fruit Trees						
Apple:	Apples	Ch. Cres	Pears	Prunes & Plums	Peaches		
1900	32,723	2,004	2,833	8,550	845		
1910	38,244	2,411	3,167	4,440	1,773		
1920	71,105	1,788	5,016	2,014	1,401		
1930	136ء 92	814	4,380	839	409		
1940	16,168	1.55	1,326	676	210		
1950	9,723	395	1,431	438	414		
1954	4,832	580	1,174	117	168		

Source: Washington Tree Fruits, Washington Crop and Livestock Reporting Service, U.S.D.A. and Wash. State Dept. of Agric., 1952

There is a small amount of berry production in Kittitas County for local use. Climatic conditions are not favorable for commercial growing of straw-berries, caneberries and bushberries. Total berry acreage is less than 10 acres for the entire county. Only about 12,000 pounds of berries per year are grown. Fresh and frozen berries are shipped in from western Washington to supply the demand.

The state of the control of the second of th

A small industry operated by about a half-dozen nurserymen to produce commercial flowers, plants and ornamental shrubbery has varied from year to year. The Census of 1949 showed a high point of sales of over \$44,000. By 1954 the commercial sales were lowered to about \$20,000. The local growing of flowers and plants under glass and in hothouses has declined. Nursery and ornamental plants hauled in from western Washington began to fill local market needs after 1950. Competition with larger nursery industries in neighboring counties is a factor limiting expansion of this specialty in the Kittitas Valley.

Table 27.- Horticultural Specialties: Nursery Products, Greenhouse Products, Flowers, Plants, Bulbs, Seeds, Mushrooms and other Special Plants.

Kittitas County, 1939-1954.

Census	(shrubs	y Products , trees and montals)	vegetables,	flowering plants vegetable seeds, elds and under gl	, bulbs and seeds; plants, mushrooms ass for sale.
Year Acres Sales from Flanted Nurseries	1	Greenhouse space	Sales from farms during the year		
1939 1944 1/	1	no data	7 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	25,000	\$10,000
1949 1954 1/ No Ce	2 2	\$11,860 3,200	eneri ki rodi. Madamatan	1,500 3,000	\$2 9,800 \$ 17,090

Source: U.S. Census, Agriculture.

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